

Cambridge Climate Protection Case Study

Cambridge Health Alliance

Action Energy Conservation Activities
Location 1493 Cambridge Street
Date January 2003 to present (ongoing)

About the Organization

The Cambridge Health Alliance (CHA), a public entity and Energy Star Partner, is an innovative network of hospitals, community health centers, and community-based programs serving the Boston Metro-North region. CHA includes The Cambridge Hospital, Somerville Hospital, Whidden Memorial Hospital, 22 primary care sites, a physicians organization, and Network Health – a managed Medicaid health plan. CHA is an independent public authority. The Cambridge Hospital is affiliated with Harvard Medical School. CHA is also a member of both Partners Healthcare and Caregroup provider networks.

What They Did

Motivation Utility costs were soaring and there was a need to align infrastructure improvement efforts with energy reduction and increased environmental awareness.

Project Goals Using 2003 levels as a benchmark, CHA aimed to reduce overall energy consumption, including water, by at least 3%.

Key Players Every member of the CHA family, from the CEO to the frontline staff, was encouraged to embrace this effort as part of an overall cost reduction campaign called "waste watchers."

Actions

- Installed time clocks in clinic buildings to shut lights off at night.
- Selected Windows XP for an organization-wide operating system upgrade. This reduced electrical consumption of computer monitors by over 50%, saving \$78,000 annually.
- Installed lighting occupancy sensors in conference rooms and restrooms.
- Raised energy efficiency awareness by putting informational stickers near light switches.
- Installed variable speed drive motors to regulate the speed of large air handling units.
- Implemented energy efficiency standards for motor and air handler replacements.
- Reviewed construction plans for energy efficiency opportunities that were then incorporated into construction and renovation projects.
- Improved incoming electrical power factor by installing power factor correction capacitors, thereby reducing the peak electricity required from the utilities (NStar and National Grid).
- Retrofitted old fluorescent and spot lighting in select areas with energy efficient T-8 and T-5 fluorescent lighting; utilized in-house labor in many cases to lower costs and give staff the benefit of overtime incentives.
- Incorporated sustainability into vendor, architect, and engineer selection processes to ensure conformity with energy efficiency goals.



- Conducted training sessions for plant operations and maintenance staff to increase their knowledge of the energy efficiency of industrial materials, means, and methods.

Results

For the 12-month calendar period ending March 2005, energy consumption from fuel oil, electricity, and natural gas was 4.9%, or almost 113,000 therms, lower than the previous period.

In the Fiscal Year '05, total energy consumption was down by 5.3%. This reduction was significant - -10.6% below FY 2003 - - and far exceeded the alliance's goals.



Other Benefits to Organization

- City of Cambridge 2005 Go Green Award recipient.
- Increased exposure through public recognition of its accomplishment via outdoor signs at City Hall and various other city locations.

Lesson Learned

- We found that staff embraced the opportunity to pitch in ideas on how to save energy. Many suggested the installation of lighting occupancy sensors in their spaces.
- Engineering staff worked in teams to identify and explore savings opportunities.



Contact Person

Name	Musa G. Pam, CEM, CPE
Address	1493 Cambridge Street, Cambridge, MA 02139
E-mail	mpam@challiance.org
Phone	(617) 665-2141
Website	www.challiance.org